

PLUS Search Results for S/N 10642933, Searched January 27, 2006

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6462469  
6617609  
6707248  
6765350  
6852555  
6891326  
6982179  
6451415  
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5375117  
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5427841  
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4913744  
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5358599  
5598493  
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10642933\_CLS1.txt  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

Original Classifications

5 313/504  
3 313/506  
3 428/690  
3 438/22  
2 313/479  
2 313/503  
2 315/169.3  
2 438/701

Cross-Reference Classifications

11 313/504  
6 428/917  
5 257/40  
4 438/99  
3 136/263  
3 313/505  
3 313/506  
3 428/690  
2 136/252  
2 257/461  
2 257/99  
2 257/E21.008  
2 257/E21.027  
2 257/E21.232  
2 257/E21.257  
2 257/E21.314  
2 257/E51.017  
2 438/82  
2 445/24  
2 528/377

Combined Classifications

16 313/504  
6 257/40  
6 313/506  
6 428/690  
6 428/917  
4 438/99  
3 136/263  
3 313/503  
3 313/505  
3 438/22  
2 136/252  
2 136/256  
2 252/62.2  
2 257/461  
2 257/99  
2 257/E21.008  
2 257/E21.027  
2 257/E21.232  
2 257/E21.257  
2 257/E21.314  
2 257/E51.017  
2 313/479  
2 313/512  
2 315/169.3  
2 359/270  
2 428/209

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2 438/701  
2 438/82  
2 445/24  
2 528/377

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

16	313/504	(5 OR, 11 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/503	..With particular phosphor or electrode material
	313/504	...Organic phosphor
6	257/40	(1 OR, 5 XR)
	Class 257 :	ACTIVE SOLID-STATE DEVICES
	257/40	ORGANIC SEMICONDUCTOR MATERIAL
6	313/506	(3 OR, 3 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/506	..Plural layers
6	428/690	(3 OR, 3 XR)
	Class 428 :	STOCK MATERIAL OR MISCELLANEOUS ARTICLES
	428/411.1	COMPOSITE (NONSTRUCTURAL LAMINATE)
	428/688	.Of inorganic material
	428/689	..Metal-compound-containing layer
	428/690	...Fluorescent, phosphorescent, or luminescent layer
6	428/917	(0 OR, 6 XR)
	Class 428 :	STOCK MATERIAL OR MISCELLANEOUS ARTICLES
	428/917	ELECTROLUMINESCENT
4	438/99	(0 OR, 4 XR)
	Class 438 :	SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
	438/99	HAVING ORGANIC SEMICONDUCTIVE COMPONENT
3	136/263	(0 OR, 3 XR)
	Class 136 :	BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC
	136/243	PHOTOELECTRIC
	136/252	.Cells
	136/263	..Organic active material containing
3	313/503	(2 OR, 1 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/503	..With particular phosphor or electrode material
3	313/505	(0 OR, 3 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/505	..With electrode matrix
3	438/22	(3 OR, 0 XR)
	Class 438 :	SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
	438/22	MAKING DEVICE OR CIRCUIT EMISSIVE OF

10642933\_CLSTITLES1.txt  
NONELECTRICAL SIGNAL

- 2 136/252 (0 OR, 2 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOELECTRIC  
136/252 .Cells
- 2 136/256 (1 OR, 1 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOELECTRIC  
136/252 .Cells  
136/256 ..Contact, coating, or surface geometry
- 2 252/62.2 (1 OR, 1 XR)  
Class 252 : COMPOSITIONS  
252/62.2 ELECTROLYTES FOR ELECTRICAL DEVICES (E.G.,  
RECTIFIER, CONDENSER)
- 2 257/461 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/414 RESPONSIVE TO NON-ELECTRICAL SIGNAL (E.G.,  
CHEMICAL, STRESS, LIGHT, OR MAGNETIC FIELD SENSORS)  
257/428 .Electromagnetic or particle radiation  
257/431 ..Light  
257/461 ...Light responsive pn junction
- 2 257/99 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/79 INCOHERENT LIGHT EMITTER STRUCTURE  
257/99 .With housing or contact structure
- 2 257/E21.008 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.003 ..Manufacture of two-terminal component for  
integrated circuit (EPO)  
257/E21.008 ...Of capacitor (EPO)
- 2 257/E21.027 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.023 ..Making mask on semiconductor body for  
further photolithographic processing (EPO)  
257/E21.024 ...Comprising organic layer (EPO)  
257/E21.026 ....Characterized by treatment of photoresist  
layer (EPO)  
257/E21.027 .....Photolithographic process (EPO)
- 2 257/E21.232 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE

## OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

PARTS THEREOF (EPO)

257/E21.002 .Manufacture or treatment of semiconductor device (EPO)

257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction,

depletion

257/E21.085 ...Device having semiconductor body comprising layer, carrier concentration layer (EPO)

without

Group IV elements or Group III-V compounds with or

257/E21.211 ....Treatment of semiconductor body using impurities, e.g., doping materials (EPO)

material on

process other than deposition of semiconductor

material, or

a substrate, diffusion or alloying of impurity

257/E21.214 .....To change their surface-physical radiation treatment (EPO)

cutting

characteristics or shape, e.g., etching, polishing,

257/E21.215 .....Chemical or electrical treatment, e.g., electrolytic etching (EPO)

257/E21.231 .....Using mask (EPO)

257/E21.232 .....Characterized by their composition, e.g., multilayer masks, materials (EPO)

2 257/E21.257 (0 OR, 2 XR)

Class 257 : ACTIVE SOLID-STATE DEVICES

257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE

OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

PARTS THEREOF (EPO)

257/E21.002 .Manufacture or treatment of semiconductor device (EPO)

257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction,

depletion

257/E21.085 ...Device having semiconductor body comprising layer, carrier concentration layer (EPO)

without

Group IV elements or Group III-V compounds with or

257/E21.211 ....Treatment of semiconductor body using impurities, e.g., doping materials (EPO)

material on

process other than deposition of semiconductor

material, or

a substrate, diffusion or alloying of impurity

257/E21.214 .....To change their surface-physical radiation treatment (EPO)

cutting

characteristics or shape, e.g., etching, polishing,

257/E21.24 .....To form insulating layer thereon, e.g., for masking or by using photolithographic technique (EPO)

257/E21.241 .....Post-treatment (EPO)

257/E21.249 .....Etching insulating layer by chemical or physical means (EPO)

257/E21.257 .....Using mask (EPO)

- 2 257/E21.314 (0 OR, 2 XR)  
 Class 257 : ACTIVE SOLID-STATE DEVICES  
 257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
 OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE  
 DEVICES OR OF  
 PARTS THEREOF (EPO)  
 257/E21.002 .Manufacture or treatment of semiconductor  
 device (EPO)  
 257/E21.04 ..Device having at least one potential-jump  
 depletion barrier or surface barrier, e.g., PN junction,  
 layer, carrier concentration layer (EPO)  
 257/E21.085 ...Device having semiconductor body comprising  
 without Group IV elements or Group III-V compounds with or  
 impurities, e.g., doping materials (EPO)  
 257/E21.211 ....Treatment of semiconductor body using  
 material on process other than deposition of semiconductor  
 material, or a substrate, diffusion or alloying of impurity  
 radiation treatment (EPO)  
 257/E21.214 .....To change their surface-physical  
 cutting characteristics or shape, e.g., etching, polishing,  
 (EPO)  
 257/E21.294 .....Deposition/post-treatment of  
 layers on noninsulating, e.g., conductive - or resistive -  
 insulating layers (EPO)  
 257/E21.3 .....Post treatment (EPO)  
 257/E21.305 .....Physical or chemical etching of layer;  
 e.g., to produce a patterned layer from pre-deposited  
 extensive layer (EPO)  
 257/E21.314 .....Using mask (EPO)
- 2 257/E51.017 (0 OR, 2 XR)  
 Class 257 : ACTIVE SOLID-STATE DEVICES  
 257/E51.001 ORGANIC SOLID STATE DEVICES, PROCESSES OR  
 APPARATUS PECULIAR TO MANUFACTURE OR TREATMENT OF SUCH  
 DEVICES OR OF PARTS THEREOF  
 257/E51.002 .Structural detail of device (EPO)  
 257/E51.012 ..Radiation-sensitive organic solid-state  
 device (EPO)  
 257/E51.017 ...Comprising organic semiconductor-organic  
 semiconductor heterojunction (EPO)
- 2 313/479 (2 OR, 0 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/364 CATHODE RAY TUBE  
 313/477R .Envelope  
 313/479 ..Coating or shielding
- 2 313/512 (1 OR, 1 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
 313/498 .Solid-state type  
 313/512 ..with envelope or encapsulation
- 2 315/169.3 (2 OR, 0 XR)  
 Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS

- 315/160 PLURAL POWER SUPPLIES
- 315/167 .Plural cathode and/or anode load device
- 315/169.1 ..Diverse-type energizing or bias supplies to  
different electrodes
- 315/169.3 ...Electroluminescent device
- 2 359/270 (1 OR, 1 XR)
- Class 359 : OPTICS: SYSTEMS
- 359/237 OPTICAL MODULATOR
- 359/238 .Light wave temporal modulation (e.g.,  
frequency, amplitude, etc.)
- 359/240 ..Changing bulk optical parameter
- 359/245 ...Electro-optic
- 359/265 ....Electrochromic
- 359/267 .....Reflection-type (e.g., display device)
- 359/270 .....Particular electrolyte layer
- 2 428/209 (1 OR, 1 XR)
- Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES
- 428/98 STRUCTURALLY DEFINED WEB OR SHEET (E.G.,  
OVERALL DIMENSION, ETC.)
- 428/195.1 .Discontinuous or differential coating,  
impregnation or bond (e.g., artwork, printing, retouched  
photograph, etc.)
- 428/209 ..Including metal layer
- 2 438/701 (2 OR, 0 XR)
- Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
- 438/689 CHEMICAL ETCHING
- 438/694 .Combined with coating step
- 438/700 ..Formation of groove or trench
- 438/701 ...Tapered configuration
- 2 438/82 (0 OR, 2 XR)
- Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
- 438/51 ..Packaging (e.g., with mounting,  
encapsulating, etc.) or treatment of packaged  
semiconductor
- 438/57 .Responsive to electromagnetic radiation
- 438/82 ..Having organic semiconductor component
- 2 445/24 (0 OR, 2 XR)
- Class 445 : ELECTRIC LAMP OR SPACE DISCHARGE COMPONENT OR  
DEVICE MANUFACTURING
- 445/1 PROCESS
- 445/23 .With assembly or disassembly
- 445/24 ..Display or gas panel making
- 2 528/377 (0 OR, 2 XR)
- Class 528 : SYNTHETIC RESINS OR NATURAL RUBBERS -- PART  
OF THE CLASS 520 SERIES
- 528/373 .FROM SULFUR-CONTAINING REACTANT
- 528/377 ..From heterocyclic compound containing a  
sulfur atom as a ring member



## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S52	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
S53	8043	alkylenedioxythiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S54	276	S53 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
S55	77	S53 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
S56	65	S55 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
S57	57	S56 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S58	3	S57 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
S59	157	S54 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

S60	78	S59 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S61	78	S60 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
S62	18	S61 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S63	18	S62 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S64	13	S55 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S65	13	S64 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S66	135	S53 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
S67	14	S53 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

S68	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S69	6	S68 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
L2	8043	alkylenedioxythiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L3	276	L2 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
L4	77	L2 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
L5	65	L4 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
L6	57	L5 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L7	3	L6 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
L8	157	L3 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

L9	78	L8 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L10	78	L9 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
L11	18	L10 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L12	18	L11 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L13	13	L4 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L14	13	L13 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L15	135	L2 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
L16	14	L2 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

L17	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L18	6	L17 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27